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## **CLAIMS**:

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- 1. An educational tool, search tool or entertainment system comprising one or more identification means each associated with an item, a reader for detecting and interrogating the identification means to identify the item associated therewith and processing means operable to react in a predetermined manner to the identification of a detected item.
- 2. A system according to Claim 1, wherein the identification means comprises machine-readable identification information.
- 3. A system according to Claim 2, wherein the machine-readable identification information is held on a radio frequency transponder.
- 4. A system according to Claim 3, wherein the radio frequency transponder is a passive radio frequency transponder.
- 5. A system according to Claim 3, wherein the radio frequency transponder is an active radio frequency transponder.
- 6. A system according to Claim 2, wherein the machine-readable identification information is held on an optically (including infrared and ultraviolet) interrogatable medium.
- 7. A system according to Claim 6, wherein the medium is a barcode.
- 8. A system according to Claim 2, wherein the machine-readable identification information is held on a wired or contact transmitter.

9. A system according to Claim 2, wherein the machine-readable identification information is held in a sonic or ultrasonic transmitter.

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- 10. A system according to Claim 2, wherein the machine-readable identification information is held in an RF (including microwave and millimetrewave) transceiver.
- 11. A system according to any preceding claim, wherein the machinereadable identification information is programmable.
- 12. A system according to Claim 11, wherein programming means are provided to programme the machine-readable identification information for the identification means.
- 13. A system according to any preceding claim, wherein the reader comprises means to read machine-readable identification information.
- 14. A system according to any preceding claim, wherein the reader incorporates the processing means.
- 15. A system according to any preceding claim, wherein the reader incorporates a data storage unit.
- 16. A system according to Claim 14, wherein the processing means includes software to cause the system to react in a different manner to the identification of respective items.
- 17. A system according to any preceding claim, wherein the reader incorporates a user interface.

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- 18. A system according to Claim 17, wherein the user interface includes a video display operable to display information based on the identity of a detected item.
- 19. A system according to Claim 17 or 18, wherein the user interface includes an audio processing unit operable to announce or announce information based on the identity of a detected item.
- 20. A system according to any one of Claims 17 to 19, wherein the user interface includes a data input device.
- 21. A system according to any preceding claim, wherein a personal computer is associated with the reader to provide the processing means and data storage in addition to or instead of the reader.
- 22. A system according to any preceding claim, wherein the reader is a portable reader.
- 23. A system according to any preceding claim, wherein the reader is a toy.
- 24. A system according to any preceding claim, wherein the identification means is provided in the form of a label attachable to an item.
- 25. A system according to any preceding claim, wherein the identification means is locatable in an item.
- 26. A system according to any preceding claim, wherein the reader includes a response activation unit which is operable upon detection of an item.

27. A system according to any one of Claims 1 to 24, wherein the reader is operable to activate a response activation unit associated with the reader upon detection of an item.

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- 28. A system according to any preceding claim, wherein the reader is operable to count the number of items which are detectable by the reader and provide the count information to a user interface associated with the reader.
- 29. A system according to Claim 12, wherein the reader includes the programming means.
- 30. A system according to any preceding claim, wherein the item is a person.
- 31. A system according to any preceding claim, wherein the reader and/or the identification means includes a counter incrementable each time a particular identification means is interrogated by the reader to provide information concerning the number of times a particular identification means has been interrogated by the reader.
- 32. A system according to Claim 31, wherein a response of the reader is varied in dependency upon the number of times a particular identification means has been interrogated by the reader.
- 33. A method of providing entertainment or educational information or searching comprising the steps of: providing one or more items with detectable identification means; detecting an item; interrogating the item and identifying

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the item from the identification means; and providing information in response to the identification of an item.

- 34. A method according to Claim 33, wherein the step of providing information comprises providing a signal operable to control a mechanism.
- 35. A method according to Claim 33 or 34, wherein a reader is operable to interrogate the item and identify the item from the identification means, the method comprising the further step of programming the reader to search for a specific item.

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## AMENDED CLAIMS

[received by the International Bureau on 30 June 2000 (30.06.00); original claims 1-35 replaced by amended claims 1-37 (5 pages)]

- 1. An educational tool, search tool or entertainment system comprising one or more identification means each associated with an item, the identification means comprising programmable machine-readable identification information, a reader for detecting and interrogating the identification means to identify the item associated therewith and processing means operable to react in a predetermined manner to the identification of a detected item.
- 2. A system according to Claim I, wherein the machine-readable identification information is held on a radio frequency transponder.
- 3. A system according to Claim 2, wherein the radio frequency transponder is a passive radio frequency transponder.
- 4. A system according to Claim 2, wherein the radio frequency transponder is an active radio frequency transponder.
- 5. A system according to any preceding claim, wherein the machinereadable identification information is held on an optically (including infrared and ultraviolet) interrogatable medium.
- 6. A system according to any preceding claim, wherein the machinereadable identification information is held in a sonic or ultrasonic transmitter.
- 7. A system according to any preceding claim, wherein the machinereadable identification information is held in an RF (including microwave and millimetrewave) transceiver.

- 8. A system according to any preceding claim, wherein programming means are provided to programme the machine-readable identification information for the identification means.
- 9. A system according to Claim 8, wherein the programming means are operable to programme the machine-readable identification information for more than one identification means.
- 10. A system according to any preceding claim, wherein the reader comprises means to read machine-readable identification information.
- 11. A system according to any preceding claim, wherein the reader incorporates the processing means.
- 12. A system according to any preceding claim, wherein the reader incorporates a data storage unit.
- 13. A system according to Claim 11, wherein the processing means includes software to cause the system to react in a different manner to the identification of respective items.
- 14. A system according to Claim 10, comprising a plurality of identification means, wherein the reader is operable to detect more than one identification means.
- 15. A system according to Claim 14 wherein the processing means includes software to cause the system to react in a predetermined manner to the detection of more than one identification means.

- 16. A system according to Claim 14 or 15, wherein the reader is operable to count the number of identification means detectable thereby.
- 17. A system according to Claim 16, wherein the processing means includes software to cause the system to react in a manner that is dependent upon the number of identification means detected.
- 18. A system according to any one of Claims 14 to 16, wherein the reader is operable to establish the order in which multiple identification means are detected.
- 19. A system according to Claim 18, wherein the processing means includes software to cause the system to react in a predetermined manner to the order in which multiple identification means are detected.
- 20. A system according to any preceding claim, wherein the reader incorporates a user interface.
- 21. A system according to Claim 20, wherein the user interface includes a video display operable to display information based on the identity of a detected item.
- 22. A system according to Claim 20 or 21, wherein the user interface includes an audio processing unit operable to announce or announce information based on the identity of a detected item.
- 23. A system according to any one of Claims 20 to 22, wherein the user interface includes a data input device.

- 24. A system according to any preceding claim, wherein a personal computer is associated with the reader to provide the processing means and data storage in addition to or instead of the reader.
- 25. A system according to any preceding claim, wherein the reader is a portable reader.
- 26. A system according to any preceding claim, wherein the reader is a toy.
- 27. A system according to any preceding claim, wherein the identification means is provided in the form of a label attachable to an item.
- 28. A system according to any preceding claim, wherein the identification means is locatable in an item.
- 29. A system according to any preceding claim, wherein the reader includes a response activation unit which is operable upon detection of an item.
- 30. A system according to any one of Claims 1 to 28, wherein the reader is operable to activate a response activation unit associated with the reader upon detection of an item.
- 31. A system according to Claim 8 or 9, wherein the reader includes the programming means.
- 32. A system according to any preceding claim, wherein the item is a person.

- 33. A system according to any preceding claim, wherein the reader and/or the identification means includes a counter incrementable each time a particular identification means is interrogated by the reader to provide information concerning the number of times a particular identification means has been interrogated by the reader.
- 34. A system according to Claim 33, wherein a response of the reader is varied in dependency upon the number of times a particular identification means has been interrogated by the reader.
- 35. A method of providing entertainment or educational information or searching comprising the steps of: providing one or more items with detectable identification means; detecting an item; interrogating the item and identifying the item from the identification means; and providing information in response to the identification of an item.
- 36. A method according to Claim 35, wherein the step of providing information comprises providing a signal operable to control a mechanism.
- 37. A method according to Claim 35 or 36, wherein a reader is operable to interrogate the item and identify the item from the identification means, the method comprising the further step of programming the reader to search for a specific item.